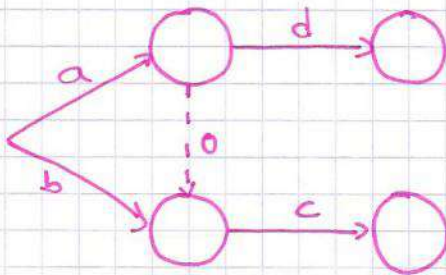


Exercice 1: Ordonnement PERT

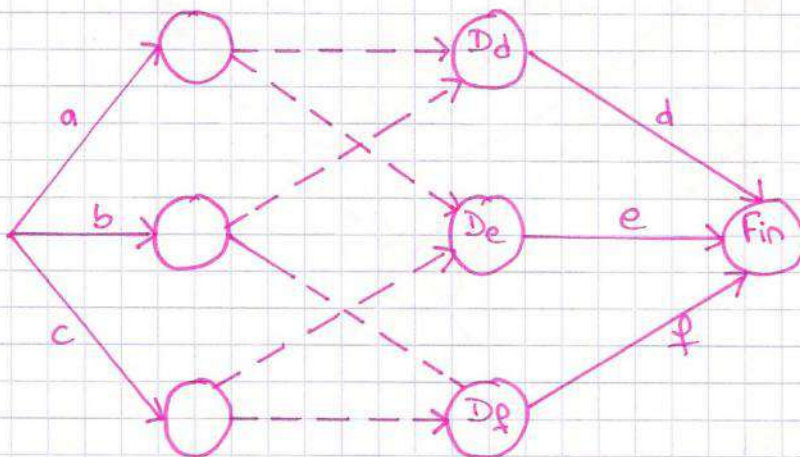
a)

Tâches	Tâches antérieures
a	/
b	/
c	a, b
d	a



b)

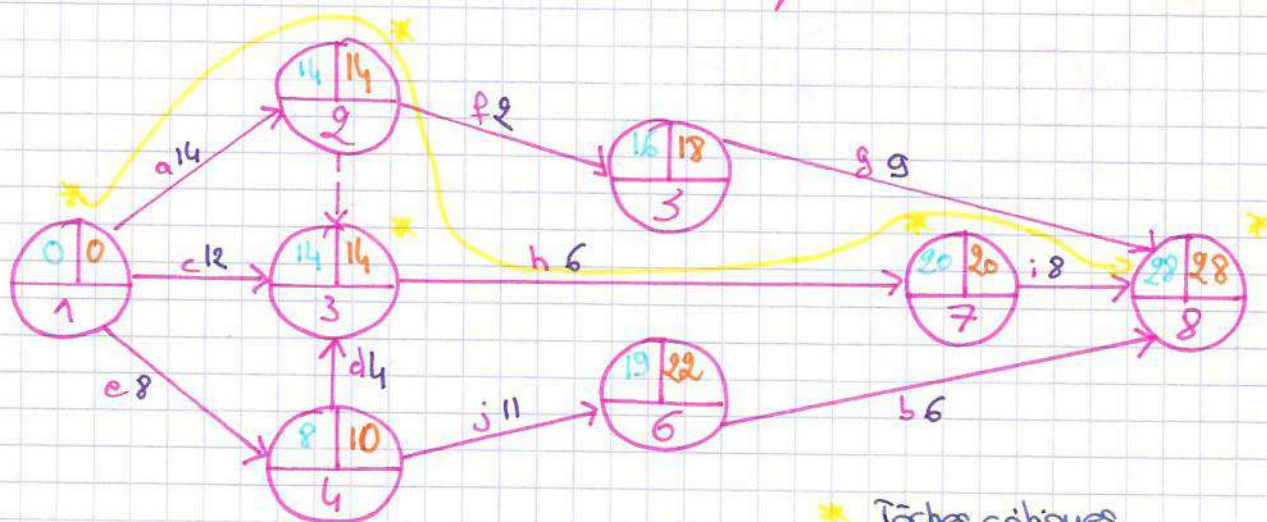
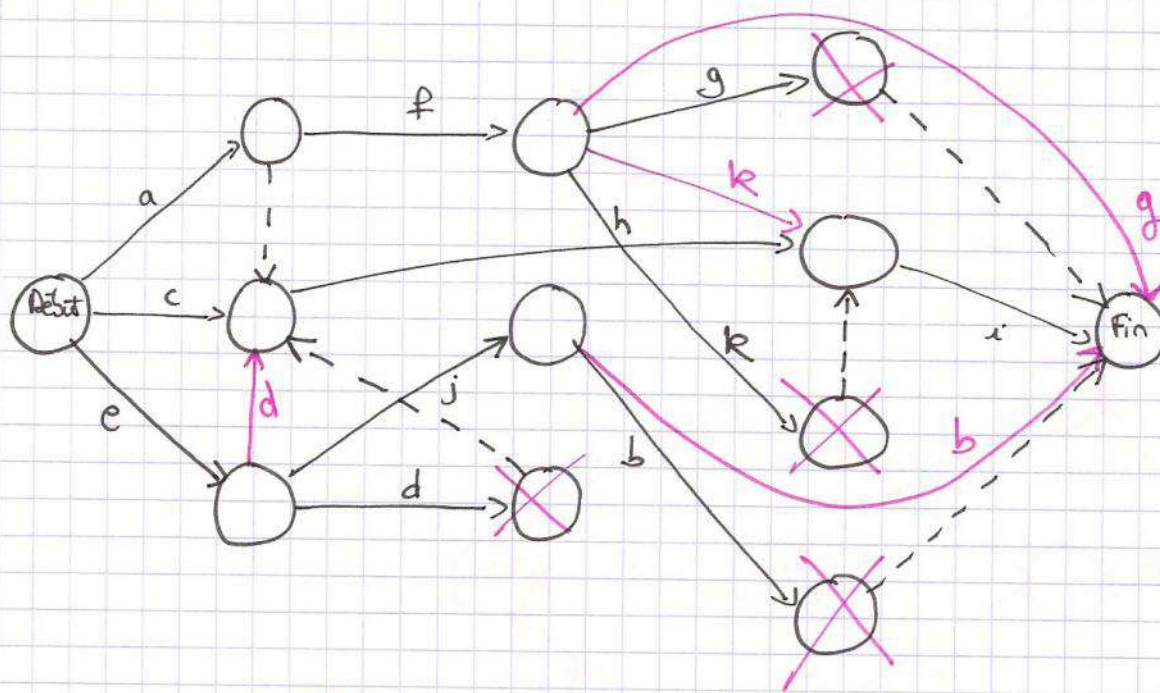
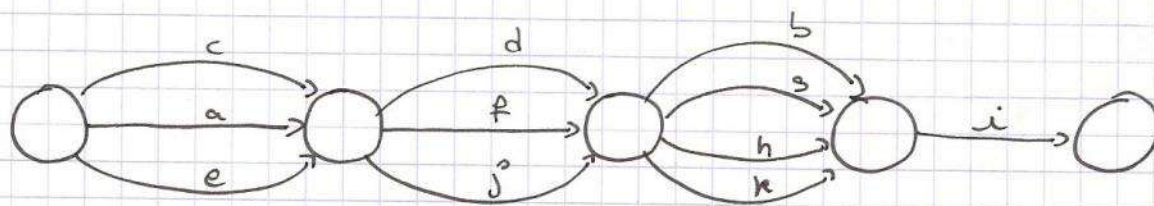
x	P(x)
a	/
b	/
c	/
d	a, b
e	a, c
f	b, c



Exercice 2 : Ordonancement par la méthode des potentiels-étapes (PER)

1)

Tâches	Durée	P(x)	P(P(x))	P(x)	Rang
a	14	/	/	/	0
5	6	j, e	e	j	0
c	12	/	/	/	0
d	4	e	/	e	1
0	8	/	/	/	0
6	10	a	/	a	1
5	6	a, f	a	f	2
1	8	a, c, d	e	a, c, d	2
1	8	a, c, d, e, f, h, k	a, c, d, e, f	h, k	3
6	11	e	/	e	1
2	2	a, f	a	f	2



★ Tâches critiques
 Chemin critique

3)

	a	b	c	d	e	f	g	h	i	j	k
Date début au + tôt $x_k^* \rightarrow T_k = t_x$	0	19	0	8	0	14	16	14	20	8	16
Date début au + tard $x_k^* \rightarrow T_k = t_x^* - d_k$	0	22	2	10	2	16	19	14	20	11	18
Marge totale	0	3	2	2	2	2	3	0	0	3	2
Marge libre	0	3	2	2	0	0	3	0	0	0	2
Marge certaine	0	0	2	0	0	0	1	0	0	0	0

$$u_k = t_j - t_i^* - d_k$$